

# Installation instructions

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Electronic urinal flushing system

ProDetect 2

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## Publishing Information

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### 12 Publishing Information

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# General Data

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## 13 General Data

### 13.1 Conventions used

#### Action instructions

Steps to be carried out are shown as a numbered list. The sequence of the steps must be complied with.

Example:

1. Action step
2. Action step

The results of an action instruction are shown as follows:

- ▶ Arrow
- ▶ Arrow

#### Lists

Lists without a fixed chronological sequence are shown as sets of bullet points.

Example:

- Item 1
- Item 2

### 13.2 Target groups

The target groups of these operating instructions are installers and operators.

#### Installers:

- e.g. trained craftsmen and artisans. Under authorisation by the operator, these persons carry out work for which they have the necessary expertise, gained from a professional education or comparable practical training, in order to be able to carry out the work which is encountered in an expert and appropriate manner with regard to safety and risk. Their work is governed by the instruction, checking and responsibility of trained supervisory/expert personnel appointed by the operator.

#### Electricians:

- These experts are, on account of their technical training, knowledge and experience, as well as their knowledge of the applicable standards and stipulations, capable of carrying out work on electrical installations and of detecting and avoiding possible dangers independently. The electricians are trained specially for the site where they are active, and they are familiar with the relevant standards and stipulations.

### 13.3 Guarantee

Villeroy & Boch accepts no responsibility for malfunctions and damage caused by improper installation.

Use only original Villeroy & Boch parts.

# Safety

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## 14 Safety

### 14.1 Intended use

The ProDetect 2 must be used exclusively with fresh water. Dirt particles in the water can block the solenoid valve and the basket filter.

Use the ProDetect 2 only in combination with the following urinals:

- Architectura 5586 / 5587 / 5574
- Subway 7513
- O.novo / Omnia 7507 / 7557 / 7527

Intended use also includes:

- compliance with all instructions in the installation instructions
- compliance with the inspection and maintenance tasks
- exclusive use of original parts

### 14.2 Reasonably predictable misuse

Any use other than those listed under "intended use", or use which goes beyond this, is considered to be non-intended.

For damage arising from non-intended use, the operator himself is exclusively responsible, and the manufacturer does not accept any liability whatsoever.

Care must be taken when installing the ProDetect 2 because of the limited assembly space of urinals.

Note the following instructions:

- Do not crush cables
- The sensor must be installed in the correct position and in the correct sensor direction
- The power supply for the mains model must be installed in the correct position
- Use only recessed sockets for installation of the mains power connection
- Do not use surface-mounted sockets with projecting surrounds when installing the mains power connection
- Once the urinals have been installed, no cables may hang down through the inspection shaft

## Safety

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### 14.3 General safety instructions

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**Warning!**

Electrocution from touching live components!

Severe injury and even death can be the consequences.

For a mains model, the mains connection must be made exclusively by electricians.

Do not insert or pull out the mains plug with wet hands.

When carrying out work, make sure that the power lead is disconnected from the mains and secured against reconnection.

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**Caution!**

Danger to the environment from incorrect handling of environmentally hazardous materials.

Considerable damage to the environment can be caused by incorrect handling of environmentally hazardous materials, especially incorrect disposal.

Dispose of batteries properly. Do not dispose of used batteries in the household waste.

Observe the local regulations.

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**Caution!**

Danger to the environment from incorrect handling of environmentally hazardous materials.

Considerable damage to the environment can be caused by incorrect handling of environmentally hazardous materials, especially incorrect disposal.

Recycle electronic equipment, or dispose of properly. Do not dispose of electronic equipment in the household waste.

Observe the local regulations.

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## Technical data

### 15 Technical data

Sensor function	Detection of urine flow in the urinal	
Sensor principle	HF Sensor 5.8 GHz	
Power supply (variants)	Switching power supply unit <ul style="list-style-type: none"> <li>• Primary: 100-240V, +/- 10%, 50 - 60 Hz</li> <li>• Secondary: 12V DC, 1A</li> </ul>	
	Battery 6 x 1.5V alkaline (type AA / LR6)	
Service life of battery	approx. 3 years / 200,000 flushes	
Operating elements	2 buttons	
Display elements	1 LED	
Interface	Digital data interface integrated into the power supply cable for connecting a Bluetooth adapter	Diagnosis, setting functions via smartphone / tablet PC
Setting functions: (Factory setting bold)	Flush volume 0.8 / 2 / 3 / 4 l (at 3 bar)	Detailed settings via app (optional)
	Hygienic rinse on / off	Detailed settings via app (optional)
	Stadium mode on / off	Detailed settings via app (optional)
	Base sensitivity low / normal	Also via app
	Minimum usage duration 9 / 7 / 5 / 3 sec	Also via app
	Hybrid mode on / off and intervals 1 / 3 / 6 / 12 / 24 / 48 hour	Also via app
	Reset to factory settings	Also via app
	Cleaning/block mode (on / off)	Only via app
Protection class of electronics	IP 64	Dust-tight, protection from water spray from all directions



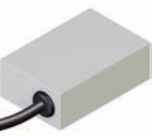


## Delivery contents

### 16 Delivery contents

#### 16.1 Standard delivery contents

Check that delivery contents are complete and undamaged on arrival.



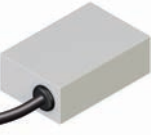


Urinal flushing system with power supply unit

Component	Designation	Item number	Quantity
	Complete system	9190N100	-
	Controller	91906800	1
	220V power supply unit	91906400	1
	HF Sensor	91906000	1
	Hosing / water circuit including solenoid valve	91906600	1
	Rubber seal	91905500	1
	Terostat Tape	-	3
	Installation instructions	-	1
	Operating Instructions	-	1



## Delivery contents

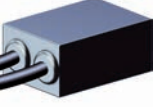
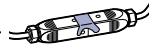
### Urinal flushing system with battery

Component	Designation	Item number	Quantity
	Complete system	9190B100	-
	Controller	91906800	1
	Battery compartment	91906500	1
	HF Sensor	91906000	1
	Hosing / water circuit including solenoid valve	91906600	1
	Rubber seal	91905500	1
	Terostat Tape	-	3
	Installation instructions	-	1
	Operating Instructions	-	1

## Delivery contents

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### 16.2 Optional components

Component	Designation	Item number	Quantity
	Bluetooth adapter (possible only with mains mode l)	91906100	-
	Bluetooth adapter	-	1
	Terostat Tape	-	1
	Mains connection adapter	91905700	-
	Mains connection adapter	-	1
	Installation instructions	-	1

## Installation

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### 17 Installation

#### 17.1 Suitable urinals



**Advice!**

Urinals with vertical discharge

Always use a mains model for urinals with vertical discharge.

We recommend installing the optional Bluetooth adapter. This will ensure simple operation of the system without dismantling the urinal.

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Use the ProDetect 2 only in combination with the following urinals:

- Architectura 5586 / 5587 / 5574
- Subway 7513
- O.novo / Omnia 7507 / 7557 / 7527

#### 17.2 Installing the hosing



**Advice!**

At first installation of urinal and ProDetect 2

Carry out all necessary steps in the separate assembly instructions for fitting the urinal before installing the hosing.

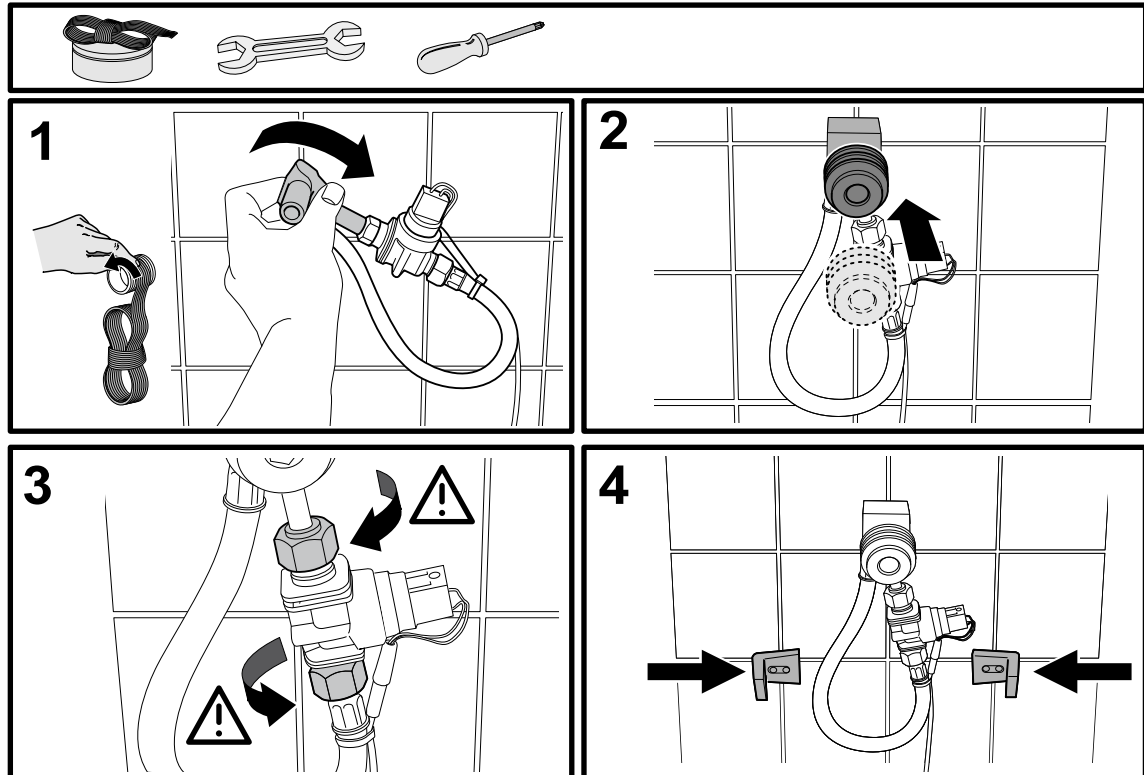


**Advice!**

Retrospective installation of ProDetect 2

Before installing the hosing, remove the urinal attachments.

## Installation

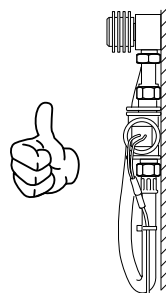


1. Seal the thread at the hosing attachment nozzle with Teflon tape, and screw the pipe union into the water connector.
2. Attach the rubber seal.

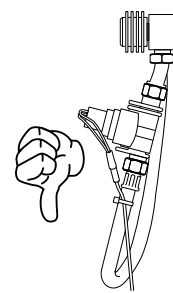


### Advice!

The hosing must be routed parallel to the wall.



The solenoid valve must not stand away from the wall.



3. Tighten the two lock nuts on the solenoid valve support housing.
4. Screw on the urinal mountings if necessary, depending on the type of urinal.

## Installation

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### 17.3 Installing the urinal

See separate assembly instructions for the respective urinal for instructions on installation.

### 17.4 Installing the HF-sensor

The HF sensor is connected to the controller by a plug-in cable.

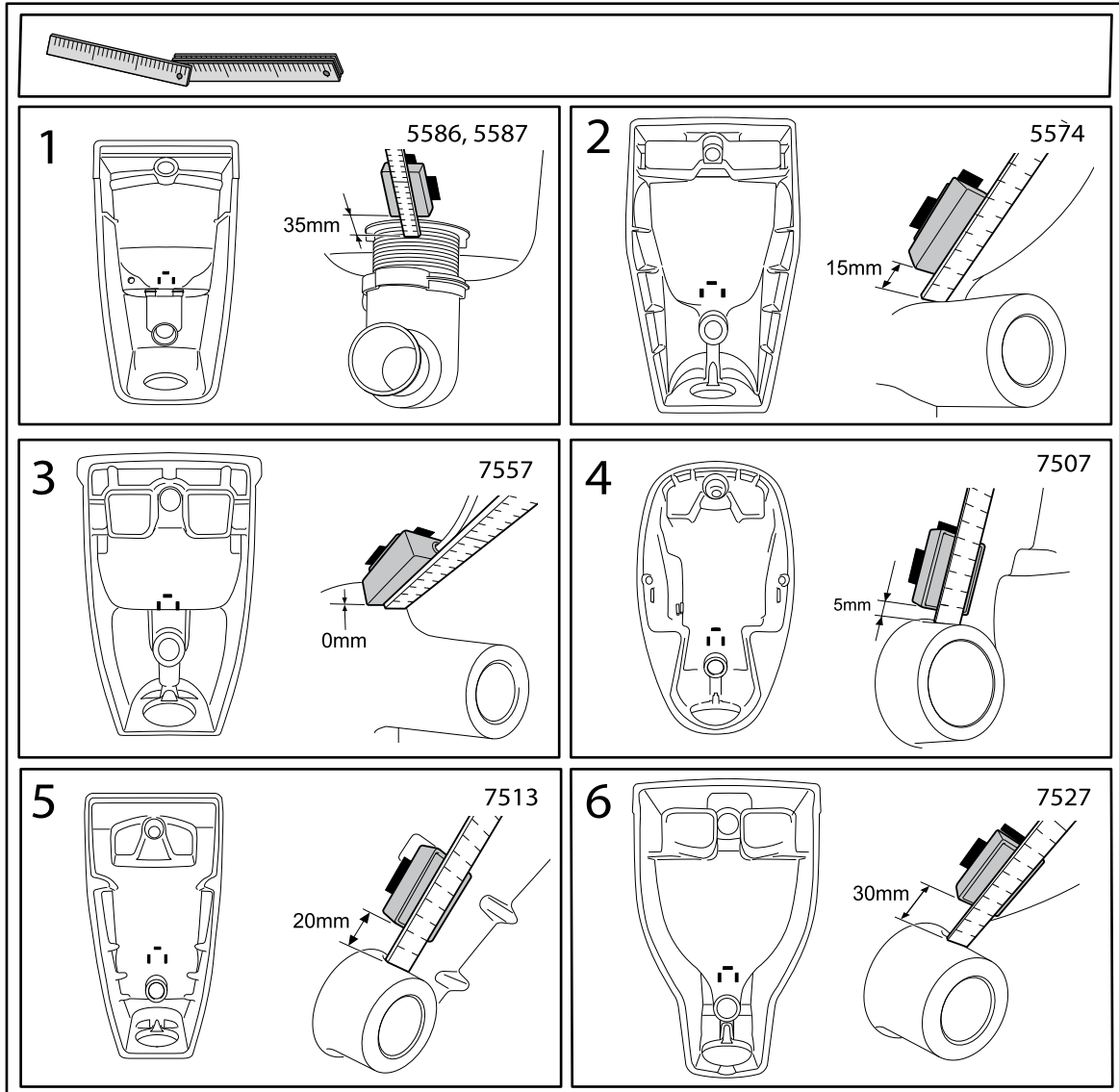


**Advice!**

The ceramic and the component to which it is to be attached must be clean, dry, and free from dust in the bonding area.

# Installation

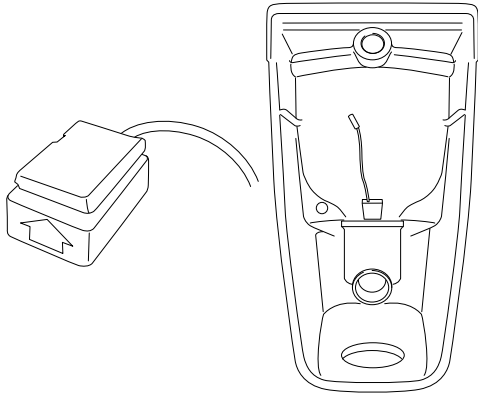
## Installation positions



## Installation

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### Attaching the HF sensor



1. Attach the Terostat tape (supplied) to the HF sensor.
  - ▶ The arrow on the HF sensor must point towards the ceramic.
  - ▶ The sensor cable is guided upwards.
2. Depending on which urinal is used, attach the HF sensor to the spot marked on the ceramic, and push firmly.

### 17.5 Installing the Bluetooth adapter (optional)



#### Advice!

Mains model

The Bluetooth adapter can be used only with mains operation.

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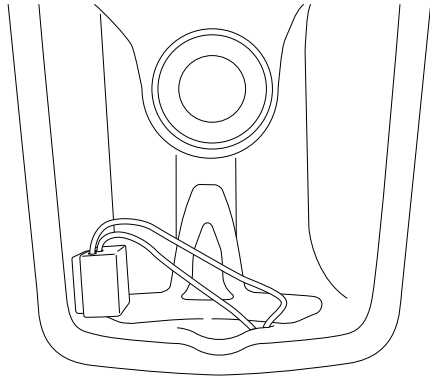
ProDetect 2 is pre-fitted for the connection of a Bluetooth adapter.

The Bluetooth adapter is permanently installed in the urinal.

## Installation

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### Installation position

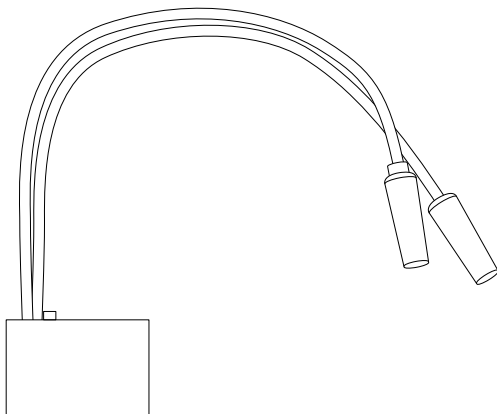


### Attaching the Bluetooth adapter



#### Advice!

The ceramic and the component to which it is to be attached must be clean, dry, and free from dust in the bonding area.

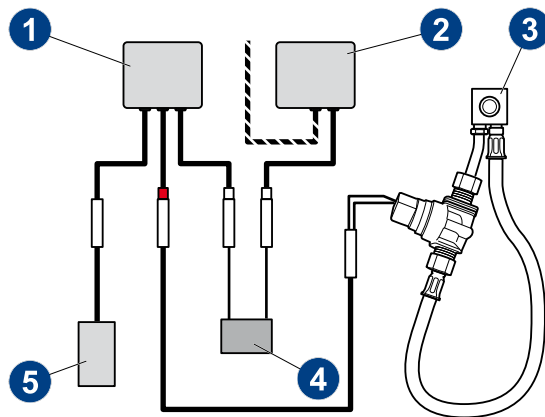


1. Attach the Terostat tape (supplied) to the Bluetooth adapter.
  - ▶ The labelled side must be visible.
2. Attach the Bluetooth adapter to the designated place on the ceramic, and push firmly.



# Installation

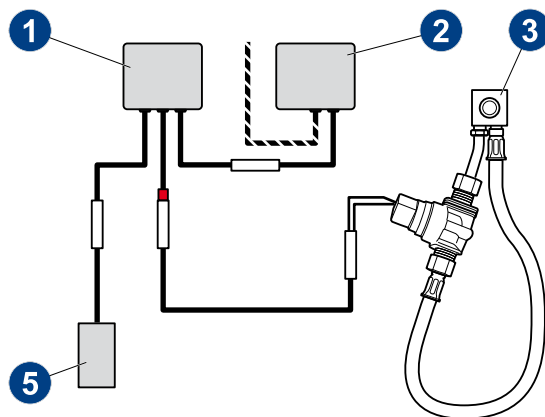
## Connection diagram



- 1 Controller
- 2 Power supply
- 3 Hosing incl. solenoid valve
- 4 Bluetooth adapter
- 5 Sensor

When connecting without a Bluetooth adapter

Connect the power supply unit directly to the controller (arrow).



## 17.6 Preparing the connection for the mains model

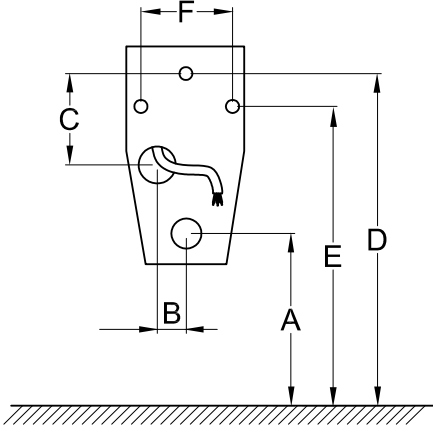


### Advice!

Use of surface-mounted sockets is forbidden. Covers must not project from the wall surface

## Installation

### Mounting dimensions for mains power supply

Mounting dimensions + position of power outlet for mains model							
							
Art. no.	Collection	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
5586	Architectura	350	70	300	825	675	235
5587	Architectura	350	70	300	825	675	235
5574	Architectura	470	70	300	865	680	260
7507	O.novo / Omnia	390	70	110	815	635	245
7557	O.novo / Omnia	430	60	200	800	720	200
7527	O.novo / Omnia	395	50	240	815	740	210
7513	Subway	405	50	260	825	680	180

### Connecting to the mains power supply



#### Warning!

Electrocution from touching live components!

Severe injury and even death can be the consequences.

For a mains model, the mains connection must be made exclusively by electricians.

Do not insert or pull out the mains plug with wet hands.

When carrying out work, make sure that the power lead is disconnected from the mains and secured against reconnection.

Connect power supply unit to the 220V power supply. We recommend connecting via the separately-available adapter art. no. 91905700 (optional).

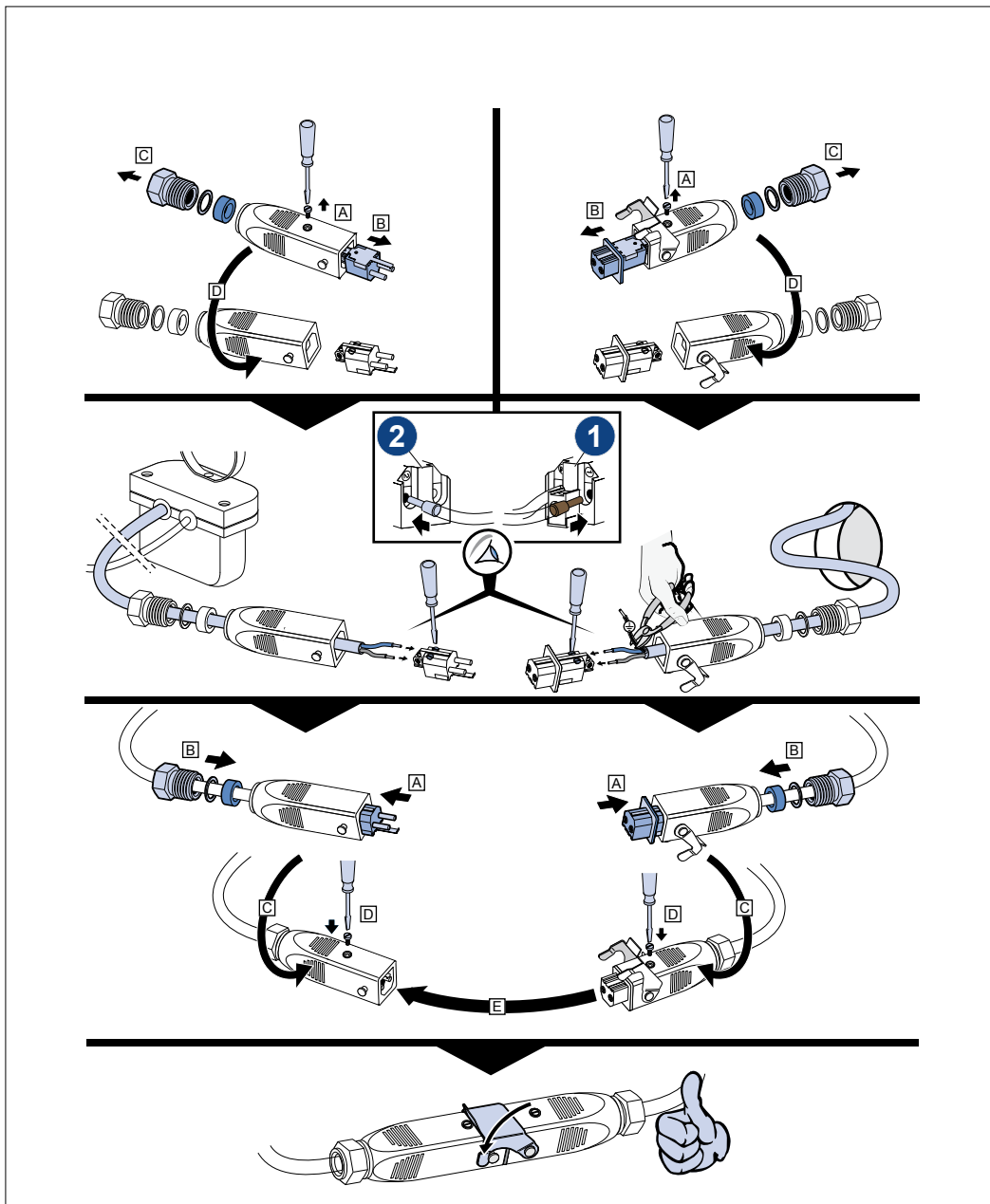
# Installation

## 17.7 Installing urinal flush hing system

Preparation for mains model

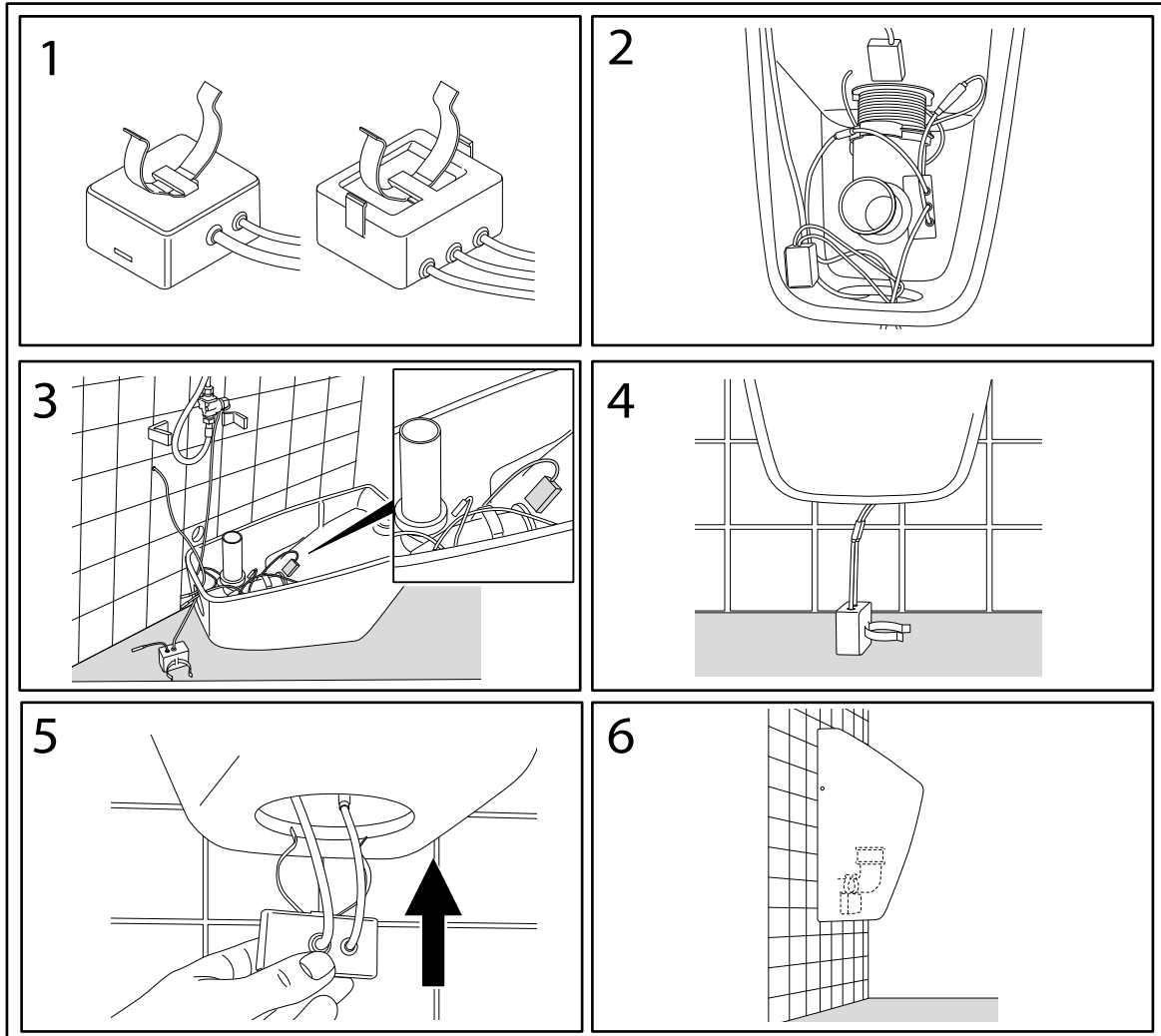
Connect to the power supply.

Installation of the mains adapter for mains model



# Installation

Urinals with horizontal discharge, type 5586, 5587



## Installation

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1. Fit clamping bracket to the power supply unit, and to the controller.
2. Clamp controller to the siphon pipe. Connect Bluetooth adapter, if it is used, and HF sensor to the controller.
3. Route the solenoid valve cable and power supply of controller (and Bluetooth cable when using the Bluetooth adapter) downwards through the inspection opening.
  - ▶ For mains model: Connect to 220V network, [see "Connecting to the mains power supply", page 51](#). Route power supply unit down through the inspection opening.



### Advice!

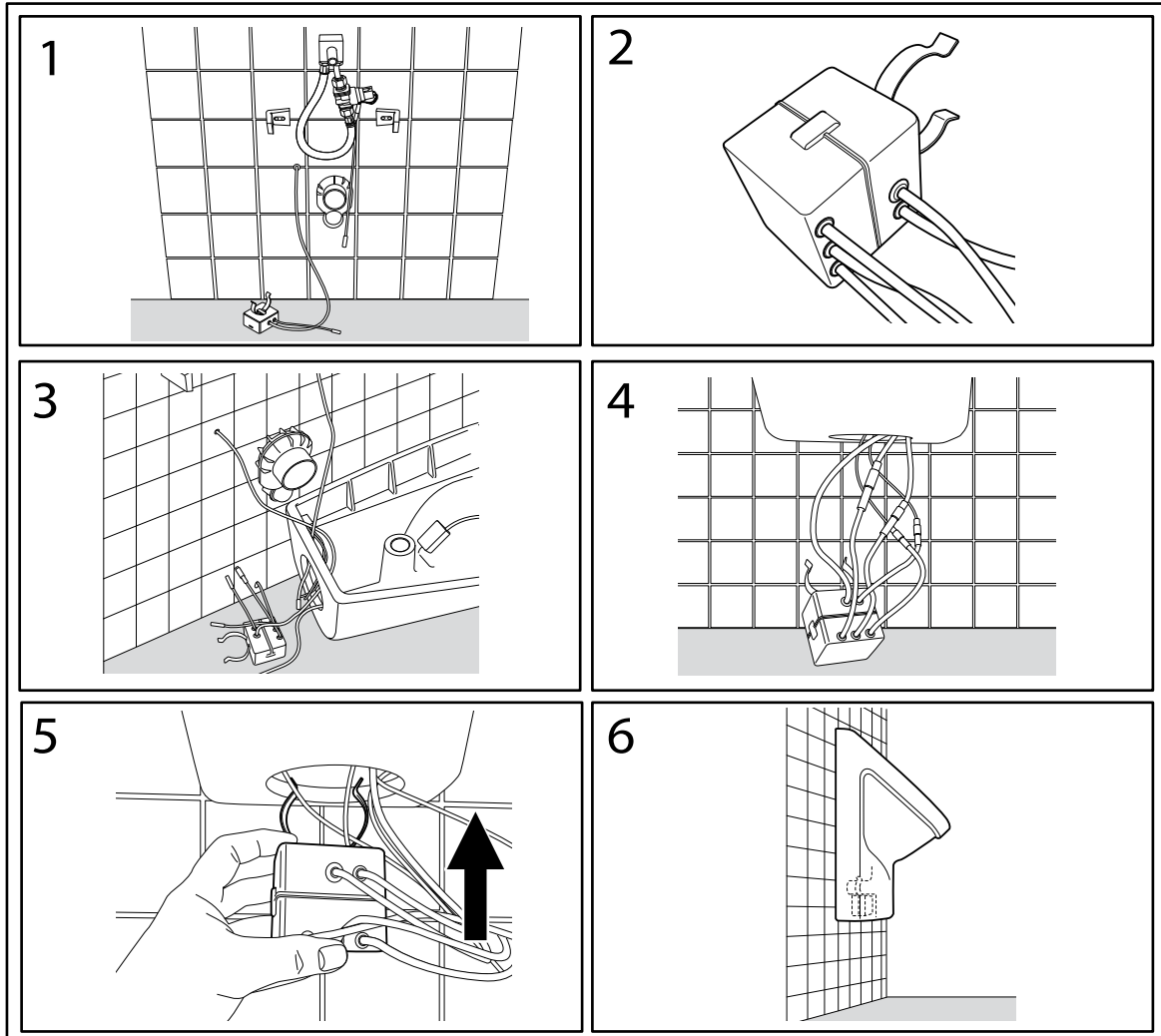
If no Bluetooth adapter is mounted:

Before mounting the urinal, connect the urinal flushing system to the power supply for test purposes, and if necessary adjust the settings on the controller; see separate operating instructions.

4. Attach urinal to the wall. Connect urinal flushing system incl. power supply unit/battery compartment, [see "Connection diagram", page 50](#).
5. Push cable carefully upwards into the urinal.
  - ▶ We recommend that the cable outlets of the housing (which is to be pushed in) face forwards.
6. Push the power supply unit or battery compartment through the inspection opening and attach it to the siphon tube using the clamping bracket.
  - ▶ Ensure that the cables are no longer visible.

# Installation

Urinals with horizontal discharge, type 5574, 7507, 7557, 7527, 7513



## Installation

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1. Mount siphon, if necessary connect to mains power supply (only for mains model).
2. Attach clamping bracket to the power supply unit and snap the controller onto the power supply unit.
3. Route solenoid valve cable, sensor cable and controller incl. power supply/battery compartment downwards through the inspection hole. If the Bluetooth adapter is used route the connection cable also downwards through the inspection hole.
  - ▶ For mains model: Connect to 220V network, [see "Connecting to the mains power supply", page 51](#). Route power supply unit down through the inspection opening.



### Advice!

If no Bluetooth adapter is mounted:  
if necessary, adjust the settings on the controller, see separate operating instructions before mounting the urinal flushing system.

4. Attach urinal to the wall. Connect urinal flushing system, [see "Connection diagram", page 50](#).
5. Push cable carefully upwards into the urinal.
  - ▶ We recommend that the cable outlets of the housing (which is to be pushed in) face forwards.
6. Push the complete housing unit through the inspection opening and attach to the siphon tube using the clamping bracket.
  - ▶ Ensure that the cables are no longer visible.

## Installation

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Urinals with vertical discharge, type 5574, 7507, 7557, 7527, 7513



**Advice!**

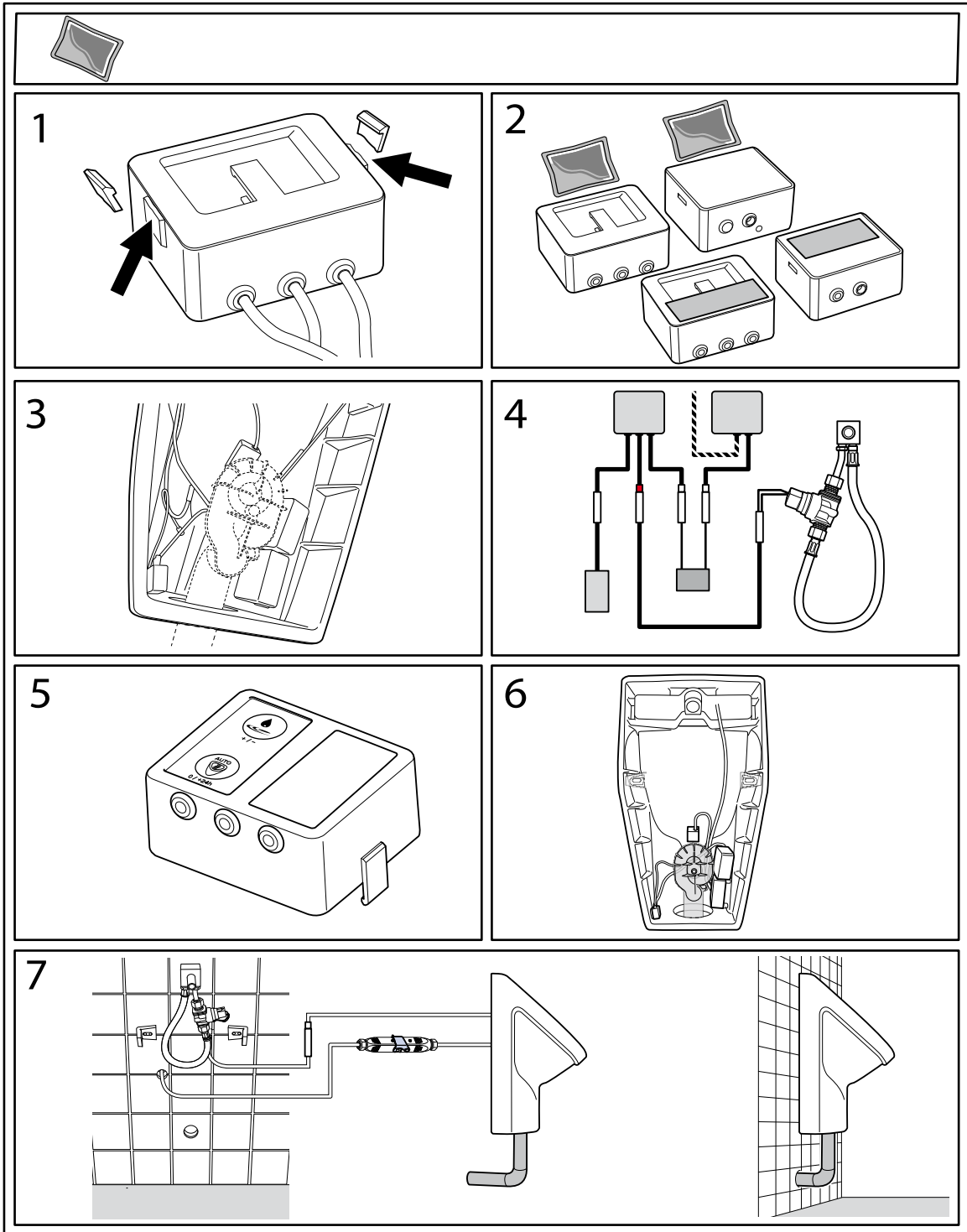
Urinals with vertical discharge

Always use a mains model for urinals with vertical discharge.

We recommend installing the optional Bluetooth adapter. This will ensure simple operation of the system without dismantling the urinal.



# Installation



## Installation

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1. Break the snap-lugs off the controller.



**Advice!**

The ceramic and the component to which it is to be attached must be clean, dry, and free from dust in the bonding area.

2. Attach the Terostat tape (supplied) to the housing base of the controller and of the power supply unit.
3. Attach the controller and power supply unit to the ceramic; for positions [see "Housing positions for urinal with vertical discharge", page 60](#).



**Advice!**

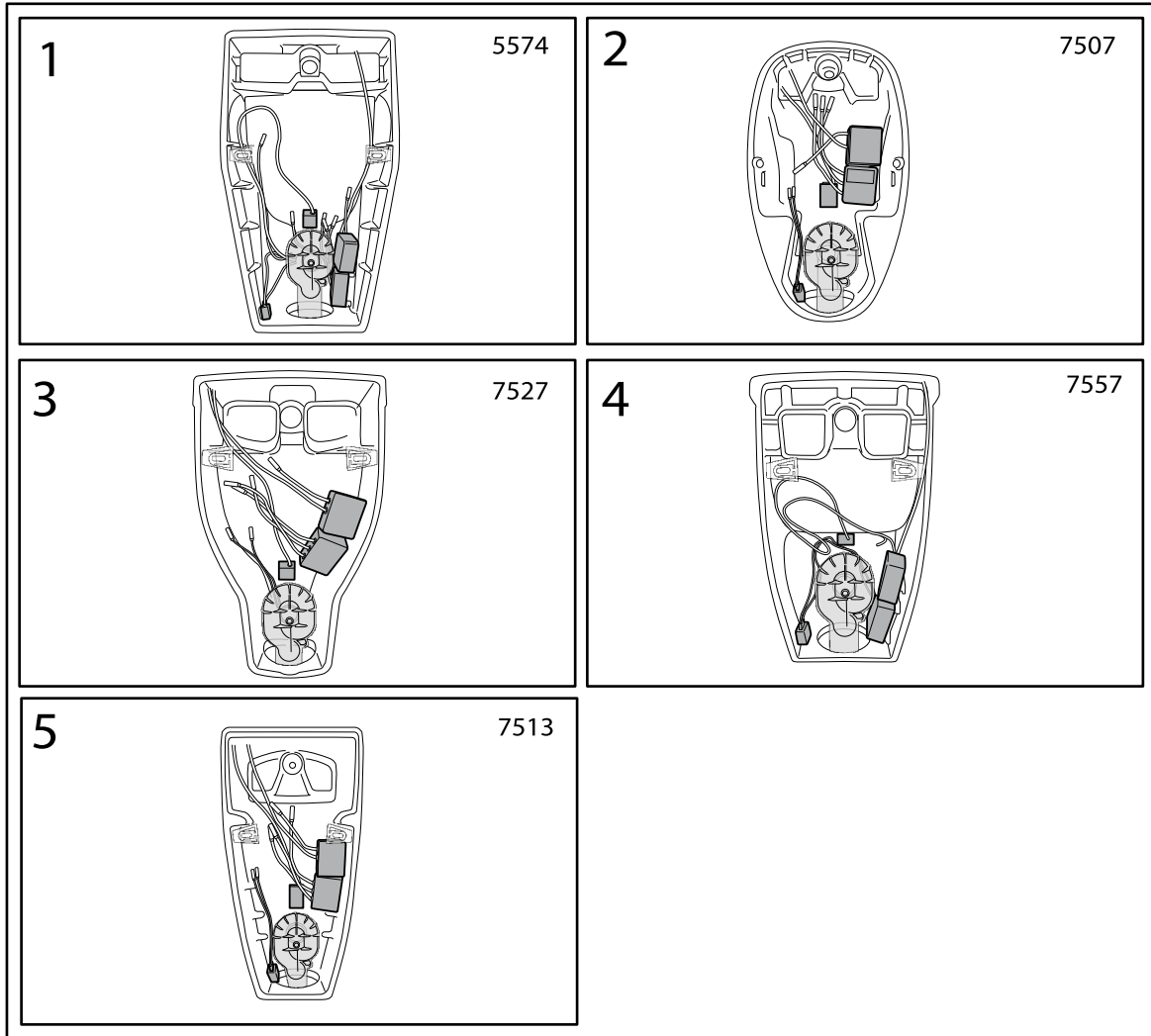
If no Bluetooth adapter is mounted:

Before mounting the urinal, connect the urinal flushing system to the power supply for test purposes, and if necessary adjust the settings on the controller; see separate operating instructions.

4. Connect the urinal flushing system, [see "Connection diagram", page 50](#).
5. Set the urinal controller.
6. Mount siphon onto ceramic.
7. Connect the power supply to the 220V mains using the mains adapter and afterwards mount the urinal to the wall.
  - ▶ Ensure that the cables are no longer visible. The cables must be neither crushed nor damaged.

# Installation

Housing positions for urinal with vertical discharge



## Decommissioning

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### 18 Decommissioning



**Caution!**

Danger to the environment from incorrect handling of environmentally hazardous materials.

Considerable damage to the environment can be caused by incorrect handling of environmentally hazardous materials, especially incorrect disposal.

Recycle electronic equipment, or dispose of properly. Do not dispose of electronic equipment in the household waste.

Observe the local regulations.



**Caution!**

Danger to the environment from incorrect handling of environmentally hazardous materials.

Considerable damage to the environment can be caused by incorrect handling of environmentally hazardous materials, especially incorrect disposal.

Dispose of batteries properly. Do not dispose of used batteries in the household waste.

Observe the local regulations.

1. Switch off water at the stop cock.
2. In the case of the mains model, switch off the power supply.
3. In the case of the battery model, remove batteries.

The urinal flushing system is dismantled in the reverse order of its installation; [see "Installation", page 44](#).


## Spare parts

### 19 Spare parts

Spare part	Designation	Item number
	Rubber seal	91905500
	Hosing / water circuit including solenoid valve (preassembled)	91906600
	220V power supply unit	91906400
	Battery compartment	91906500
	Controller	91906800
	HF Sensor	91906000
	Solenoid valve	91906700
	Backflow preventer (insert into inlet spigot)	91906300

## Spare parts

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Spare part	Designation	Item number
	Basket filter (insert into hosing)	91906200